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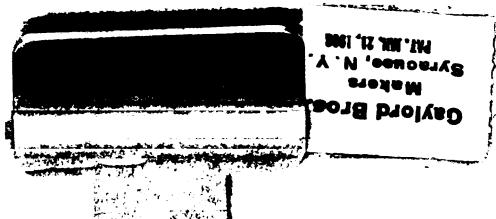
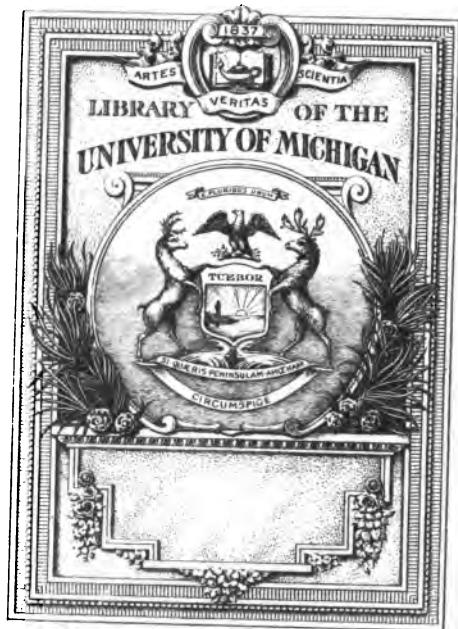
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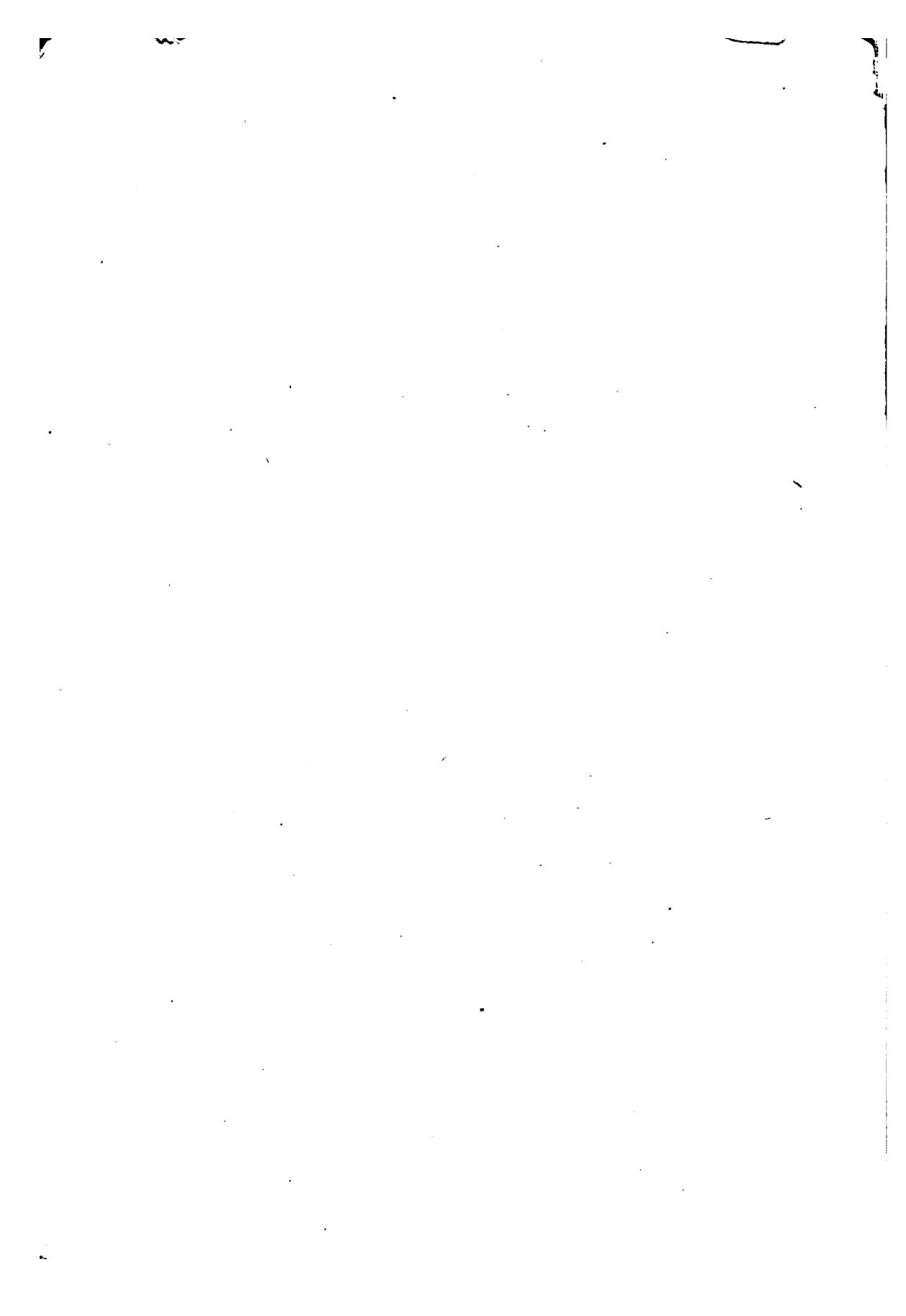
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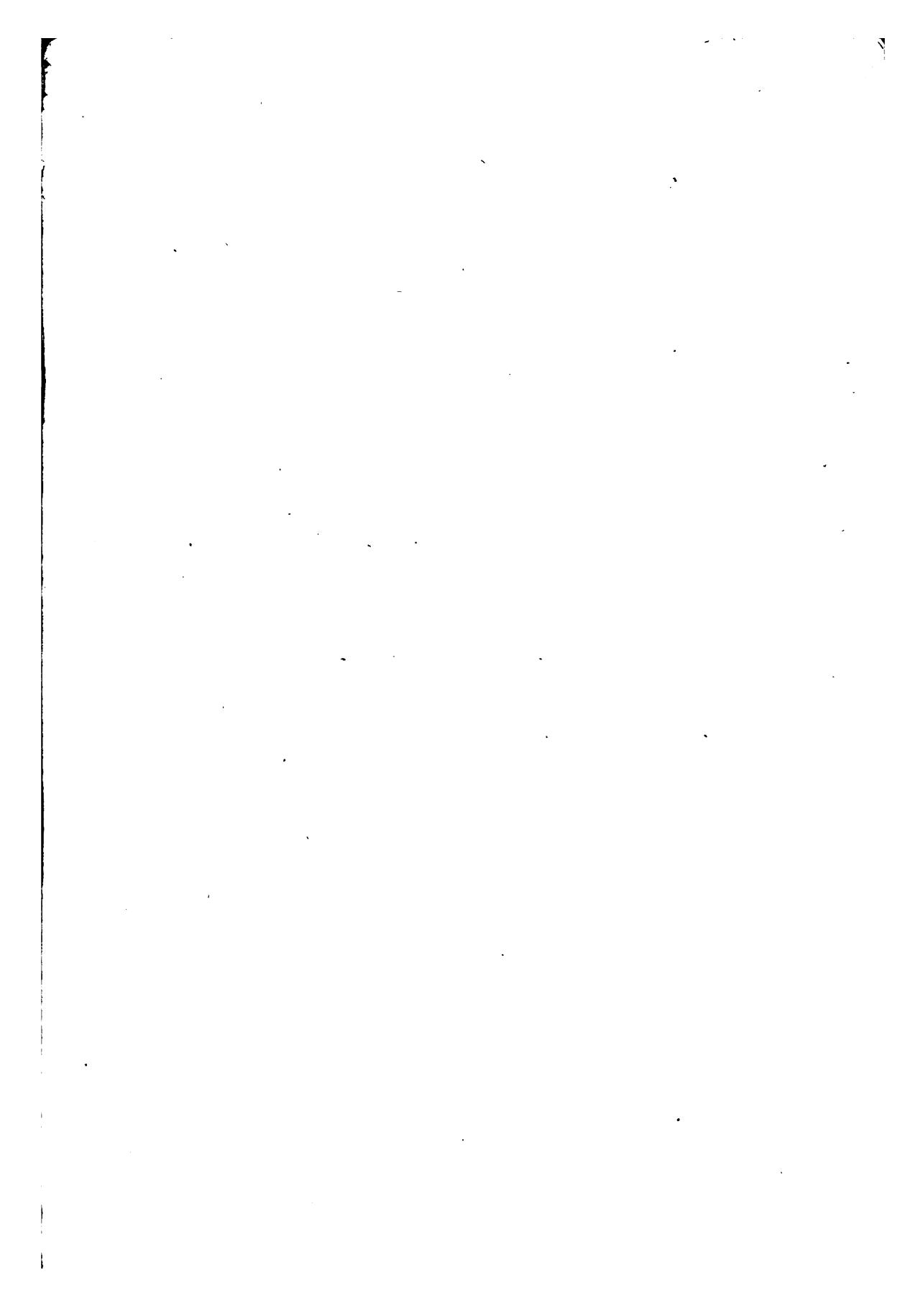
HIGHER EDUCATION AND THE PEOPLE

A PAPER READ BEFORE THE JOINT SESSION OF THE
MICHIGAN POLITICAL SCIENCE ASSOCIATION
AND THE
MICHIGAN FARMERS' INSTITUTES

BY
HENRY C. ADAMS
PROFESSOR OF POLITICAL ECONOMY AND FINANCE IN THE
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ANN ARBOR, MICH.
1902







HIGHER EDUCATION AND THE PEOPLE.

BY PROFESSOR HENRY C. ADAMS OF THE UNIVERSITY.

No one can regret more than myself the enforced absence of Dr. Angell, President of our University, to whom this paper on "Higher Education and the People" was assigned in the program as originally drawn. It is evident this topic should receive consideration in order to round out the educational feature of our program, which explains why I have consented, at the last moment, to say a few words respecting it. The topic is of peculiar significance when discussed before a Michigan audience. This State stands committed to the policy of public education and gives to the phrase a broad and comprehensive meaning, including not only what is technical and general, but the idea of popular education as well, for it is no misuse of language to include the Farmers' Institutes, as at present organized and conducted, within the educational system of the State. It is an interesting fact that at this, the joint meeting of the Farmers' Institutes and the Michigan Political Science Association, every phase of the problem of education receives either direct or indirect consideration.

In discussing the relation of higher education to the people, I shall undertake no extended definition of higher education. It is a term which changes its meaning from time to time in order to meet the changing needs of the community. As used in the present discussion, it includes both the general and technical instruction offered by colleges, and the research carried on by instructors in these institutions. This last point seems to me of great importance, for under existing ideas relative to education, an institution of higher learning must be a center for

investigation as well as a place for instruction. The extension of knowledge is as truly a function of universities as is the imparting of that knowledge. The true teacher must be an investigator.

Thus defined the relation of higher education to the people may be considered from three points of view. These are as follows:

First. The point of view of those who seek an education.

Second. The point of view of those who make use of the services of experts and professional men trained at the college or university.

Third. The point of view of the political, social and industrial conditions which are in large measure the product of higher institutions of learning.

So far as the individual student is concerned, very little can be said upon the topic in hand. Were the question of education entirely, or even primarily, a personal question, there would be no answer to the argument that he who is benefitted by the instruction ought to pay for it. But this assumption does not present the matter in its true light. Our society is a complex affair. Each class depends for its prosperity upon the prosperity of other classes. The life of each individual is bound up with the life of all. Such being the case the advantage of an education to the individual cannot present the point of view from which the question of the relation of the higher education to the people may reasonably be discussed.

There is, however, one observation relative to this aspect of higher education of peculiar significance to us in Michigan. It is a matter of no slight importance to the citizens of this State that the highest in education lies open, and practically free, to any one who desires to avail himself of its advantages. Under such conditions education can never result in the establishment of a class. It can never get very far from the needs of the people. It

can never become an aristocratic affair. From the primary school to the university, the opportunity of securing an education lies open to every citizen of the State. Were it not for the constant recruits from all classes of the people, the University, and I doubt not, also, the Agricultural College, might as well close its doors. Statistical data in support of this statement could be submitted, were that necessary, but I leave this phase of the subject to hasten to what seems of relatively greater importance, namely, the general and social advantage of maintaining higher institutions of learning.

The second point of view from which the relation of higher education to the people may be considered pertains to the character of the service rendered by the men and women who receive collegiate and university instruction. The range of knowledge at the present time is so broad that no one person, however gifted, can become its master. Specialization is the rule in all progressive life, and the degree to which specialization is carried may be accepted as a measure of social advancement. The product of successful specialization is the expert. It may be that the motive which leads one to become an expert is the hope of personal advantage which knowledge gives, but it would be a mistake to assume that this advantage stops with him who by strenuous study becomes an expert. Indeed, we do not begin to measure its importance until we appreciate the extent to which it is used by the public at large. We are apt to overlook the fact that it is impossible to develop an expert of high efficiency without raising the general plane of excellence in the class to which he belongs. An expert physician, for example, is only possible upon the basis of a highly developed science of medicine. Such a physician must avail himself of the thousands of experiments in the many laboratories scattered throughout the world. Each laboratory makes its contribution; each publishes its discovery. As isolated

facts, these contributions and discoveries are of slight importance, but, correlated with the contributions and discoveries of other laboratories, they build up a body of useful knowledge which, in the hands of a skilled physician, permits not only the alleviation of pain, but the control of diseases before regarded as a sentence of death.

Citizens of Michigan may contemplate with pride this phase of our argument, for no medical school in this country, and few in Europe, have made more positive or helpful contributions to the science of medicine, during the last quarter of a century, than the one which our State supports. One or two illustrations of what the development of the science of medicine has done in recent years may not be inappropriate.

Diphtheria used to be one of the most dreaded of diseases, and well might this be the case. Before the discovery of modern treatment, fifty cases in an hundred terminated fatally; at present the ratio of mortality is ten in an hundred. In the matter of milk and milk poisons, there has been wonderful advance in recent years. The record of fourteen hospitals in the City of New York shows that, in the case of children brought for treatment suffering from summer complaint, the average rate of mortality has been reduced from eighty-five per cent to fifty per cent. I might continue such illustrations without number, but these mentioned are adequate to show that technical excellence on the part of the physician is of more importance to the patient, and to us who are friends of the patient, than to the physician himself. The individual practitioner may be satisfied with a degree of excellence just above that of his competitors, for that would enable him to obtain the highest fees; what society wants, however, is a high plane of excellence on the part of all practitioners. If this be true (and the illustration applies equally to all expert and professional knowledge), the people at large are more vitally interested in the main-

tenance of higher institutions of learning, the product of which is a high level of professional excellence, than are the persons who attend those institutions.

If such a view of the case be conceded, the question of the relation of higher education to the people is thrown into a newer and truer light than when regarded from the point of view of those who receive instruction. The State, whose function it is to guard and develop the interest of the entire people, is not called upon to apologize for the expenditure of so much money as may be required to place at the disposal of the humblest citizen the advantage of expert training. The people are interested in maintaining experiment stations in all branches of useful knowledge.

It may perhaps be objected that investigation and research are not a proper function of institutions founded for instruction. To this I can only make reply, that, speaking generally and with the sanction of the history of civilization, the research which has blest the world has emanated from the universities. When institutions of higher learning cease to investigate and content themselves with teaching what the world already knows, the development of civilization will be arrested; the world will have entered upon a period of retrogression and decay. I know of no other way by which the direct interest of the body of the people in higher education can be more clearly expressed. These educational institutions are a part of the social order. They perform a function essential to the welfare of society. They render a service direct or indirect to every member of the community.

Turning now to the third point of view from which higher education may be regarded, let us consider the general as distinct from the particular services rendered by higher education. This has been foreshadowed in what has already been said, but it is capable of more definite expression by means of a few specific illustrations.

Upon what, let us ask, in the first place, does industrial prosperity depend? Speaking broadly, I reply, it depends upon the character of the soil, and of the climate, and upon the possession of raw material for manufacture. It depends also upon the safety of property and the security of contract. It depends, finally, upon the intelligence of the people which enables them to make use of natural opportunities. It is the third of these conditions of prosperity which places emphasis upon education. Intelligence has always been regarded as essential for effective labor. In mediæval times, when men used tools, industrial training was secured by means of a seven years' apprenticeship in whatever trade or craft was chosen, a fact which goes far toward explaining the wonderful handwork that has come down to us from the fourteenth and fifteenth centuries. At present tools have given way to machinery, and ability to invent new methods of production and to direct large aggregations of labor have come to be of prime importance in the maintenance of industrial efficiency. Consider this, for a moment, on the side of invention. An hundred years ago inventions were more or less accidental. The thought that Nature could be conquered by patient study, and her forces harnessed to the treadmill of industry, thus making possible the emancipation of mankind from excessive toil, was not included within the range of practical thinking. Contrast this with the present point of view. Invention is now a profession. The Bell Telephone Company, for example, which, whatever we may say of it as a monopoly, has conferred inestimable benefits upon the community, has upon its payrolls the names of men who are trained in the sciences and the arts, all of whose time is spent in the laboratory with the view of perfecting this means of transmitting thought. This is not an isolated case. Every branch of industry has its experts. No industry can continue to be progressive without its experts,

and if we admit that the modern system of industrial organization based upon machinery is of advantage to the world, we cannot evade the conclusion that the higher institutions of learning which train experts are an essential factor in establishing and maintaining our present industrial efficiency. The inventor is as important to the preservation of industrial prosperity as is the physician to the preservation of health, and when each man, whatever his business or occupation, appreciates to what extent his personal success depends upon the maintenance of general prosperity, he is forced in courtesy and in honesty to acknowledge a debt of obligation to that educational system which includes within its curriculum scientific training for investigation. Without our schools, not only would further progress be arrested, but we should soon lose the general intelligence necessary to avail ourselves of the technical progress already made.

The same conclusion would be reached were we to consider the importance of efficient management. No man today can work alone. The principle of division of labor is of universal application. This is only another way of calling attention to the importance of organization; and it goes without saying that if a thousand men are to work together they must work under the direction of a single mind, and that their efficiency as a working body depends upon the manner in which their labor is directed. But ability to manage a great industry comes not by birth; it is the result either of experience or of technical training. If learned in the school of experience it is the public that foots the bill, because it is the public that finally must bear the burden of mistakes and failures. It is far cheaper for the public to provide schools for the training of men into whose hands may be placed the management of great industries. Is it not then evident that in business as well as in the professions, the demand for training is primarily a public demand, and that the body

of the people, whether we regard the question from the point of view of organized workers seeking direction or from that of the consuming public, have a most direct and imperative interest in the maintenance of those institutions which give the needed special training. Such considerations as these suggest what I believe to be the true relation between higher education and the people.

Were further illustration of this sort necessary I might refer to the industrial history of Germany, whose recent commercial importance rests directly and avowedly upon her educational system. She has developed more extensively than any other country facilities for commercial and technical instruction. In England, also, is it coming to be recognized that the continuance of commercial supremacy depends upon the development of educational facilities; while in the United States, the necessity for commercial and technical education is forced upon the universities and colleges by the desire on the part of manufactures to secure standing in the world's market. Our own University has established a course in Higher Commercial Education, and the interest which business men have evinced in this course indicates that they appreciate the importance of trained intelligence in commercial affairs. To make this illustration tell upon our argument it is of course necessary again to remind you that the permanent success of one class, or one interest, is impossible unless it be accompanied by the success of all classes and all interests. The success of the agricultural interest, for example, is bound up primarily with the development of a home market for agricultural products, and it is a truism to say that the limit of this market is the prosperity of those members of the community not engaged in agriculture.

My next illustration of the general advantage of higher education to the community calls to our attention the changes which are rapidly taking place in the condi-

tions of rural life. In mediæval times agriculturists lived in little communities, going from their homes each day to work upon the land. Whatever we may say of the advantages of intercourse which such a system permitted, it had the decided disadvantage of restricting the land that could be tilled. The farmer of our own time, on the other hand, accustomed as he is to the use of machinery, requires a large amount of land for cultivation, and this necessitates that he and his family live upon the land cultivated. I need not dwell upon the isolation incident to this method of cultivation, nor upon the fact that school and church privileges, as well as all those social amenities which make life pleasant, are far from propitious. At present, however, there seems to be some hope of relief. Certain changes are taking place which promise much for rural life. I refer to the extension of electric lines through country districts, to the establishment of local telephone service, to the wide dissemination of electric power, to the rural mail delivery, and the like. The social possibilities bound up in the full development of these enterprises, as well as others of the same class that might be mentioned, lie beyond the power of the imagination to grasp. We are, I believe, upon the eve of far-reaching changes in the conditions of life in rural communities. Such a remark of course lies within the realm of speculation, but it is reasonable speculation. I look confidently for the time when social intercourse and manufacturing on a small scale will be restored to rural communities; and, when this shall have been accomplished, the country rather than the town will offer the opportunity for sensible living. To whom will the country be indebted for the realization of so bright a picture? The question is answered before it is asked. The tendency to which reference is made is one of the many blessings bound up in the development of science. It is the professor who, with his students, works patiently within his

laboratory at the occult problems of electricity and other mechanical agencies to whom must be granted praise for having rendered this change possible; and yet he is not entirely responsible, for without the generous support of the people, thus giving him the opportunity of investigation and instruction, he would be unable to devote his life to such a service. Thus, ever do we come back to the idea that the higher institutions of learning, under which we include research as well as instruction, are of primary, nay of essential importance to the great body of the people.

My third illustration is of an entirely different sort. It may be urged that all that has thus far been said pertains to physical science and not to general culture. It is doubtless easier to illustrate the popular advantage of higher institutions of learning by reference to the physical sciences and mechanical inventions, than by referring to what is sometimes called the culture studies, but one cannot conclude from this that the people at large are not interested in those departments of colleges and universities which concern themselves with literature, music, history, philosophy or politics. The physical sciences minister to the conditions of life; these other branches of learning minister to life itself. There are many ways in which studies of this sort spread their blessings to the community even though (which I trust may not always be the case) they are followed by a comparatively small number. Ask yourselves seriously the question, what it is you desire from your clergymen, your teachers, your statesmen, and you will be forced to recognize that these studies, sometimes called culture studies, are in reality professional studies for men who undertake to serve society in the manner suggested. Consider this suggestion, for a moment, from the point of view of the clergyman. I know of no professional class which stands in greater need of a broad and comprehensive education.

Especially is this true when we recognize to what an extent the spirit of social service has entered into the life and activities of the Church during the past twenty-five years. It is a most encouraging fact that this great institution—the peculiar guardian of the principles of religion and morality—should recognize the importance of the social as well as of the personal application of religious principles. The Church is coming to regard itself as the center from which the inspiration to a higher social and political life should emanate, rather than as a haven to which man may flee from the contaminating influences of an evil world. If, however, the Church is thus to serve as a center of positive influence in the community, it must touch the community at all points. The clergyman must be able to see how good roads are related to right living; how manual training and technical education bear upon the moral life of the boys and the girls; how charity is related to poverty; how industrial organization is but a phase of social organization and carries with it a moral influence; how the circulation of good books may result in fruitful thinking and healthful living; how through clubs for the young and societies for the old, the roof of the Church may be brought to shelter the pleasures of the people as well as their worship, and how all these agencies may be made to exert a positive influence for righteousness in the community. This is easy of statement, but it is difficult of execution. The clergyman, under this newer and broader interpretation of his functions, is nothing less than a social engineer, and if he is to perform these functions with efficiency and grace, it is imperative that he understand the complex and intricate machine which we call society. You appreciate the importance of a technical education which results in making civil and mechanical engineers, because you recognize the industrial and commercial bearing of their work. Is it not reasonable to place as high an appreciation upon the education of

social engineers who are dealing, not with the conditions of living, but with life itself? An affirmative reply to this question, or indeed any sympathy with the line of reasoning thus suggested, is an acknowledgement of the social importance of a general and comprehensive education on the part of those who have to do with the moulding of life. Indeed, from this point of view I should almost be willing to say that the so-called culture studies are professional studies. We at least find a fundamental reason why they should continue to be nourished by all higher institutions of learning.

This phase of the subject might be further illustrated by referring to the work of the teacher, or to the nature of the public service rendered by those who make our laws. I pass these, however, in order to call your attention to a yet more fundamental relation which higher education bears to the interests of the people. You have doubtless heard the question frequently discussed whether our democratic form of government is likely to stand the strain of commercial prosperity. You will not, I trust, convict me of lack of faith if I say that the pessimist who prophesies the destruction of our popular institutions can point to many tendencies which seem to give support to his doleful conclusions. Without undertaking to analyze the situation or speak critically of these tendencies, it may be appropriate to call attention to the fact, that the chief danger to which we are exposed arises from the popular worship of business success. Not only is it a misfortune to the individual, but, in its results, it becomes a public calamity, that the acquirement of wealth should be regarded as the test of a successful life. Our society is dominated by the commercial ambition. Our form of popular government is threatened by the overwhelming influence of commercial interests. Many reasons might be submitted why we need a wider diffusion of wealth and a more equal distribution of commercial power.

